

## Chapter 14

Text Pages 402–409

## STUDY GUIDE

## ● Energy from the Sun

Use the words in the box to fill in the blanks.

heat	life	absorb	radiation
sun	lower	reflects	density
waves	current	contact	conduction
sinks	campfire	environment	temperature
space	surfaces	atmosphere	convection

The \_\_\_\_\_ is the source of all energy in our atmosphere. When Earth receives this energy, some energy escapes back into \_\_\_\_\_, some is absorbed by the \_\_\_\_\_, and some is absorbed by land and water \_\_\_\_\_ . The balance among these three help the atmosphere support \_\_\_\_\_ . Energy reaches Earth in the form of radiant energy, or \_\_\_\_\_ . This process is the transfer of energy by \_\_\_\_\_ . You experience radiation when you sit by a \_\_\_\_\_ and your skin becomes warm. The molecules of your skin \_\_\_\_\_ the energy and you feel \_\_\_\_\_ . Heat is the transfer of energy from an object with a higher \_\_\_\_\_ to an object with a \_\_\_\_\_ temperature. Some radiation isn't absorbed by the atmosphere or surface objects; it \_\_\_\_\_ off the atmosphere or surface.

\_\_\_\_\_ is the transfer of energy that occurs when molecules bump into one another and heat is transferred through direct \_\_\_\_\_ . \_\_\_\_\_ is the transfer of heat that occurs because of \_\_\_\_\_ differences in the air. Because cold air has a higher density than warm air, cold air \_\_\_\_\_—this pushes up the warm air. This rise and fall of air sets up a circular movement called a convection \_\_\_\_\_ . Convection currents and other processes that transfer energy help provide the \_\_\_\_\_ we live in.